Before the Federal Communications Commission Washington, DC 20554

In the Matter of)	
)	
The Commission's Wireless)	GN Docket No. 04-163
Broadband Policies)	

To: The Wireless Broadband Access Task Force

COMMENTS

BELLSOUTH CORPORATION

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BellSouth Corporation ("BellSouth") hereby submits its comments in response to the May 5 Public Notice seeking comment on the Commission's wireless broadband policies.¹

INTRODUCTION AND SUMMARY

As the Commission is well aware, in certain locations, wired broadband Internet access via DSL, cable modem, or fiber optic cable will not be feasible in the immediate future, given the limits of the available technology.² This is particularly true in rural areas with widely dispersed populations, but it also is the case in certain urban and suburban locations where there are technical or economic obstacles to wired broadband deployment.³ Wireless technology can be a

Public Notice, Wireless Broadband Access Task Force Seeks Public Comment on Issues Related to Commission's Wireless Broadband Policies, GN Docket 04-163, DA 04-1266 (May 5, 2004).

For example, DSL service is subject to loop length limitations between the central office or remote DSLAM and the subscriber premises. Cable modem service is available only where a cable television network has been deployed and where the operator has upgraded its headend and distribution network. Fiber optic access is limited to addresses passed by fiber optic facilities.

Some homes and offices are in areas not yet wired for cable, even in urban and suburban areas, and not all cable networks have been fully upgraded, making cable modem service unavailable even in some locations where cable television is available. While wireline telephone service is available in virtually all urban and suburban locations, there nevertheless are locations where DSL service is currently unavailable due to technical obstacles (*e.g.*, loop length limitations) or the economics of deploying remote DSLAMs.

cost-effective solution to the extension of broadband access to such locations. As Chairman Powell recently observed, "Wireless can bridge distances that wireline functions can't."

Wireless broadband is not merely a substitute for wired broadband service, however: Wireless has the added advantage of portability. Depending on the quality of the wireless path, consumers can often use their computers in different rooms in their homes or offices and still retain broadband Internet access without any need for rewiring, and they may also be able to take their laptops to distant locations, away from home or office, and still enjoy broadband access. Thus, wireless broadband provides an alternative for consumers who can obtain cable modem or DSL Internet access.

BellSouth holds numerous Wireless Communications Service ("WCS"), Multipoint Distribution Service ("MDS") and Multichannel Multipoint Distribution Service ("MMDS") licenses in addition to leasing Instructional Television Fixed Service ("ITFS") capacity throughout the Southeast and is actively involved in developing ways to use this spectrum to bring high-speed Internet access to consumers and businesses. To that end, it has concluded several successful trials of wireless broadband technologies using licensed 2.3 GHz WCS frequencies and has others currently underway. As described below, the results from these trials are encouraging: By using innovative technology, BellSouth has demonstrated that WCS spectrum can be used to provide customers with upload and download speeds comparable to DSL or cable modem Internet access.

In establishing policies to govern its actions in the area of wireless broadband, it is critical that the Commission proceed from some core principles:

⁴ Chairman Michael K. Powell, Remarks at the FCC Wireless Broadband Forum, at 1 (May 19, 2004).

- Regulatory parity for comparable, competing services.
- Reliance to the greatest extent possible on market forces, with a stable, predictable regulatory environment.
- Prevention of harmful interference and timely, definitive enforcement of interference rules.
- Evenhanded encouragement of technological innovation.

Adherence to these principles will provide the industry with market-based incentives to develop efficient and beneficial wireless broadband technologies and transform them into cost-effective offerings that serve the public interest. The timely provision of competitive broadband services from wireless platforms will emerge most efficiently if the Commission facilitates such development without favoring particular technologies or service providers.

DISCUSSION

I. BELLSOUTH'S TRIALS HAVE SHOWN THAT WIRELESS TECHNOL-OGY IS A VIABLE MEANS FOR PROVIDING BROADBAND SERVICE

BellSouth has engaged in several trials of wireless broadband Internet access service using WCS spectrum. These trials demonstrate that it is technically feasible to use WCS band spectrum for providing wireless DSL-like Internet service to retail customers in a variety of environments. BellSouth views wireless DSL as an attractive option for bringing broadband service into areas where, for the foreseeable future, it will remain economically or technically infeasible to offer wired broadband via cable modem, DSL, or fiber optic distribution facilities. Moreover, the inherent portability of wireless broadband provides consumers with greater flexibility than any wired service can offer; thus, wireless DSL may be preferred by some customers even though they are capable of obtaining broadband service over fixed lines.

A. One-Way Line-of-Sight WCS Trial

In 2000, BellSouth conducted a six-month trial in Houma, Louisiana using WCS for a one-way, line-of-sight, high-speed Internet downlink to business and residential customers, with the uplink return path relying on a dial-up telephone circuit.⁵ BellSouth found that service quality was not as significantly affected as video by partial blockage of the line of sight by foliage, and, similarly, adverse weather conditions rarely affected quality (only momentary outages were reported during heavy fog). BellSouth found that at distances greater than 10 miles from the base station, an elevated antenna was typically necessary to establish line of sight, but at distances of 3-10 miles, it was generally possible to locate the receive antenna in a window or attic and still get adequate reception.

Using a single 6 MHz channel transmitted from a single tower with a 16QAM modulation scheme, the experimental system provided 18 Mbps of data bandwidth, allowing 53 customers with 81 computers to share this bandwidth and providing download speeds comparable to, or better than, cable modem or DSL.⁶ This bandwidth could support between 1500 and 2000 customers, depending on the mix of business and residential users. Capacity could be increased to 15,000 customers through measures such as adding additional channels or using alternative modulation schemes.

The participants in this trial were pleased with the improved performance compared with dial-up service, but the limited uplink speed posed a problem for some users.⁷ Most of the trial participants were reluctant to give up the service when the trial concluded; for the first time, the

The state of technology available at the time the trial was planned dictated a one-way service using line-of-sight transmission paths.

Because downloads involve periodic acknowledgements over the return path, the speed of a given customer's downloads was affected by the speed of the customer's dial-up modem.

This problem could be alleviated to some extent by use of ISDN for the return path.

trial participants had been able to connect to the Internet at speeds that rivaled DSL or cable modem technology. Their use of the service had, over the course of six months, resulted in changed usage patterns, including more frequent downloads of large files, use of streaming video and streaming audio, and more frequent web browsing. In short, increased speeds also increased the value of their broadband access.

B. Two-Way Non-Line-of-Sight WCS Trials

BellSouth learned that the limited upload speed, the need to use a dial-up link for the return path at all times, and the need for line of sight (even if partially obscured) are perceived to be significant obstacles to the widespread use of the one-way wireless broadband technology described in the preceding section. Accordingly, BellSouth subsequently designed trials of technologies that do not incorporate such limitations.

For seven months in 2003, BellSouth conducted a trial of two-way, non-line-of-sight technology in Daytona, Florida, designed to provide a wireless equivalent to DSL broadband service. This trial employed two towers, each of which used a single 5 MHz WCS channel to provide 6 MHz of traffic capacity.

Unlike the Houma, Louisiana trial, the 2003 Daytona trial employed managed subscriber down- and upstream bandwidths, ranging from "DSL Lite" speeds of 256 kbps down /128 kbps up to standard DSL speeds of 1.5 Mbps down / 256 kbps up, with some users assigned unrestricted speeds up to 2.0 Mbps down / 1.0 Mbps up. The trial assessed the suitability of locations for self-installed service (*i.e.*, using indoor CPE), enhanced self-installed service (*i.e.*, using a window-mounted antenna), and professionally installed service (*i.e.*, using an outdoor antenna).

BellSouth found that while installations were sometimes challenging for non-line-of-sight service, indoor self-installs were likely to be successful within 1-3 miles of the base station. At greater distances (up to 6-8 miles from the base station), the use of window-mounted antennas

often became necessary, or the unit needed to be installed in a second-floor room or attic and connected to a wireless router for connection to the subscriber's personal computer(s). Professional installations were rarely needed for residential customers, but were used more often for business customers. Customers found that the downstream speed of the service was comparable to wired DSL, but that the upstream speed was often superior to wired, with typical speeds that ranged up to 800 kbps. Weather conditions had no significant effect on the service.

The 2003 Daytona trial revealed that non-line-of-sight, two-way wireless DSL service is technically feasible over about a 40 square mile area per base station in an area with flat terrain and mixed foliage. Subsequently, BellSouth has begun trials of this and other technologies in several locations, including further trials in Daytona; in Palatka, Florida (test in a rural part of Florida of the same technology used in Daytona, to assess extending range for maximum effective rural coverage); in Atlanta, Georgia (comparing WCS with MMDS spectrum in urban/suburban environments); and in two North Carolina counties (testing in mountainous rural areas jointly with America Connect).

BellSouth believes that wireless technology has an important role to play in delivering broadband service to homes and businesses across America that cannot obtain it today. President Bush recently emphasized that "to make sure that we're the innovative society of the world . . . we [must] have access to . . . broadband technology in every part of our country." These trials are intended to help us learn how to turn such aspirations into reality. The rural Palatka, Florida trial, for example, involves locating a base station at the edge of the area where wired DSL can

President George W. Bush, *President Unveils Tech Initiatives for Energy, Health Care and Internet*, Remarks at American Association of Community Colleges Annual Convention (Apr. 26, 2004), *at* http://www.whitehouse.gov/news/releases/2004/04/print/20040426-6.html ("Bush Broadband Speech").

be provided, and thereby extending DSL service wirelessly into rural areas. BellSouth's Director of wireless broadband, Mel Levine, was quoted in the press as saying, "This could be the poster child for the rural divide. We've put our base station in Palatka within 100 feet of the edge of our DSL coverage, allowing us to reach all of the people we can't bring DSL to."

II. REGULATORY PARITY FOR COMPARABLE, COMPETING SERVICES

There are many different ways to provide wireless broadband service. Unfortunately, the regulations governing comparable, competing access methods are not always the same or even similar. That has the effect of skewing the market's selection of the best tool for the job, which results in technological, spectral, and economic inefficiency. A lack of regulatory parity for comparable, competing services and technologies has the net effect of regulatory handicapping — *i.e.*, "picking winners and losers" — regardless of whether the Commission intended to do so.

The Commission's uneven regulatory policies unquestionably have had the unintended side effect of skewing the market. The Commission has laudably moved in the direction of flexible regulation that does not limit licensees' discretion with respect to providing facilities and services for which there is substantial public demand. Not all of its rules are flexible, however, and a service saddled with inflexible rules is at an inherent disadvantage to a service afforded flexible rules.

For example, two years ago, BellSouth needed to use a single MMDS channel for two-way data at a location in Atlanta. It identified an appropriate channel for which it held a license at location A, downtown, but needed to move the channel to a different facility, location B. The move was from a 70 story building to a 20 story building only two blocks away. In addition, the

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⁹ Kevin Fitchard, *BellSouth Launches Second BBW Trial*, Telephony Online (April 6, 2004), http://telephonyonline.com/ar/telecom bellsouth launches second/index.htm>.

power would have been reduced, so there was no possibility of any increase in harmful interference — indeed, interference would have decreased. In spite of the lack of any interference effect, the MMDS rules required BellSouth to comply with procedures for a major application filing, including formal notification to adjacent license holders, comment period and opportunity to object. Predictably, the result was weeks of legal and engineering preparation, at considerable cost, and then an additional three months for the FCC to review the filing and decide whether to grant the application. The result was favorable, but at a time that was too late for the two-way data trial to take place.

In contrast, the Commission's WCS rules permit the installation of a base transmitter at a location that will not cause interference outside the designated service area without any prior application; antenna clearance may be required, but that involves much less delay. The rules, in short, favor the use of WCS spectrum over MMDS spectrum for two-way data, whether or not that is the best or most efficient way of providing the service or that was the Commission's intention when it adopted its rules.

The Commission's rules should not favor one band of spectrum, technology, or radio service over another. Instead, the Commission should allow the market to determine the optimum access technology. To facilitate market-based broadband technology choices unskewed by FCC rules, the Commission should seek, to the greatest extent possible, to establish a uniform regulatory environment for similarly situated radio services and technologies. This will permit vendors and service providers to use the most efficient technology or radio service to meet customers' needs, instead of relying on regulatory judgments that are assured of being outpaced by technological innovation. Consumers will benefit directly from evenhanded regulation in a competitive environment because providers will be better able to respond to consumer demand.

III. RELIANCE ON MARKET FORCES AND A PREDICTABLE REGULATORY ENVIRONMENT

Another way in which the Commission's rules, regulations, and policies can unintentionally skew technology choices is with respect to the stability and predictability of the regulatory environment. For example, MDS suffers greatly in any comparison with other radio services because the Commission has left its future in limbo for years. In 2001, the Commission proposed to relocate MDS channels 1 and 2/2A to alternative spectrum, ¹⁰ and in 2002 it decided to actually relocate those channels. ¹¹ Nevertheless, the Commission did not identify the relocation spectrum then or at any time in the following seventeen months, and the various alternatives under consideration all have differing disadvantages for MDS licensees. ¹² The result is that "MDS licensees are being harmed every day this regulatory cloud remains over Channels 1 and 2/2A." Needless to say, any company with a choice between using MDS spectrum and a comparable alternative band for a wireless broadband application will choose the latter because of the uncertain MDS regulatory situation, regardless of whether the alternative spectrum turns out to be the better solution from a technology or efficiency viewpoint.

See Allocation of Spectrum below 3 GHz, ET Docket 00-258, Notice of Proposed Rulemaking, 16 F.C.C.R. 596, 619 (2001).

See Allocation of Spectrum below 3 GHz, ET Docket 00-258, Second Report and Order, 17 F.C.C.R. 23193, 21212-13 (2002).

See Allocation of Spectrum below 3 GHz, ET Docket 00-258, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, 16 F.C.C.R. 16043 (2001); Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order, 18 F.C.C.R. 2223 (2003); and comments responsive thereto; see also Letter dated April 7, 2004, from BellSouth Corporation, Sprint Corporation, and Wireless Communications Association International, Inc., to Chairman Michael K. Powell, ET Docket 00-258 ("BellSouth-Sprint-WCA Letter"); Reply Comments of Wireless Communications Association International, Inc., Service Rules for Advanced Wireless Services, WT Docket 02-353 (March 8, 2004).

BellSouth-Sprint-WCA Letter at 1.

In the interest of rolling out wireless broadband across the nation to make broadband access as nearly universally available as possible by 2007, as the President has urged,14 the Commission must restore clarity and predictability to the regulatory environment to maximize the efficient use of the MDS spectrum. This will speed the delivery of wireless broadband and other new, innovative services to consumers across the United States. When the Commission, for homeland security or other national policy reasons, requires a particular group of incumbent licensees to relinquish their spectrum involuntarily, it must promptly provide the affected licensees with replacement spectrum comparable to that which they are forced to vacate, and it also must ensure that the affected licensees' relocation costs are fully recompensed. Both in the case of MDS and any other similar situation in the future, the Commission should avoid leaving licensees in a state of regulatory limbo; it should expedite its proceedings from the time it proposes a relocation until the relocation spectrum is identified and the relocation and compensation rules are finalized. Only when licensees have a stable regulatory environment will they have the confidence to invest in new facilities for extending broadband service to customers currently lacking such service.

Likewise, a stable regulatory environment requires that the Commission establish the rules and policies that will govern a particular band of radio spectrum before it auctions licenses and allows licensees to build networks in that band of spectrum. The licenses, combined with the rules, should both define the licensees' obligations and guarantee the licensees' rights for a defined period of years. The Commission should consider increasing the stability of the regulatory environment, creating a climate that favors investment based on market conditions, by ex-

See Bush Broadband Speech ("I'm talking about broadband technology to every corner of our country by the year 2007 with competition shortly thereafter. . . .").

tending the terms of the licenses it issues to be commensurate with the investment-based expectations of today's telecommunications marketplace.

Only if the rules are established in advance, can potential providers evaluate the value of licenses and make reasoned, market-based decisions about whether, and how much, to bid and construct networks; the Commission should make clear that any party that constructs a network before the rules for the applicable spectrum are established does so at its own risk. Failure to establish the rules in advance will punish sound economic analysis and reward speculation and game-playing, giving speculative licensees an incentive to use their "investment" as a lever for seeking preferential rules, thereby protecting investments made at their own risk and even leveraging the value of their investments by obtaining additional rights as a windfall.¹⁵

With stable, evenhanded regulation of the services under FCC jurisdiction, market forces will be more likely to solve the problem of how to extend broadband service via wireless technology into areas currently unserved. In order for the market to reach an efficient solution, however, wireless broadband regulatory policies need to be reformed to allow licensees to respond to market forces, as the President has envisioned:

[A] proper role for the government is to clear regulatory hurdles so those who are going to make investments [in broadband technology] do so. Broadband is going to spread because it's going to make sense for private sector companies to spread it so long as the regulatory burden is reduced — in other words, so long as policy at the government level encourages people to invest, not discourages investment. . . . Listen, one of the technologies that's coming

For example, Satellite Digital Audio Radio Service licensees were issued licenses for transmission from space stations before the rules were completed for the service. Subsequently, they used the fact that they had begun constructing networks (nominally at their own risk) that might not function effectively, to justify expanding their rights as licensees to operate full-fledged, high-powered terrestrial stations, as well. *See* Letter from Karen B. Possner, BellSouth, to the Secretary, IB Docket 95-91 (May 18, 2001).

is wireless. . . . [W]ireless technology is going to change all that so long as government policy makes sense. 16

Consistent with the President's objectives, the Commission should revise its wireless rules to foster an evironment that encourages investment in wireless broadband solutions. Spectrum holders must have the flexibility to provide whatever wireless broadband services consumers demand, within the parameters of the service and technical rules applicable to their spectrum.

IV. INTERFERENCE PREVENTION AND ENFORCEMENT

The Commission must not lose sight of its core function: to prevent harmful radio interference by setting appropriate rules and enforcing those rules in a timely and effective manner. Sometimes, preventing interference and enforcing the rules takes a great deal of time and effort on the part of both the licensee and the Commission. As BellSouth and Cingular said in another proceeding, "the FCC can, and will, over an extended period of time, padlock offending facilities that create harmful interference. But the process usually takes years."

In its *Interference Temperature* proceeding, the Commission appears to be moving away from this core function by relinquishing its responsibility and relying instead on "smart radios" and grids of "interference thermometers." Not a single commenter in that proceeding, however, supported the Commission's proposals, and most found the proposals unworkable. Even if the interference temperature metric worked in principle, however, a regulatory scheme premised on innumerable radios making autonomous judgments about interference would pose near-

Comments of Cingular Wireless LLC and BellSouth Corporation, *Interference Temperature*, ET Docket 03-237, at 37 (filed April 5, 2004) ("Interference Temperature Comments").

See Bush Broadband Speech.

See Establishment of an Interference Temperature Metric to Quantify and Manage Interference and to Expand Available Unlicensed Operation in Certain Fixed, Mobile and Satellite Frequency Bands, ET Docket 03-237, Notice of Inquiry and Notice of Proposed Rulemaking, 18 F.C.C.R. 25309 (2003).

impossible, potentially unsurmountable enforcement challenges. The Comments filed by Bell-South jointly with Cingular Wireless LLC illustrate this point as follows:

> Consider the scenario of a large convention center served by several licensed carriers and a large number of unlicensed "underlay" users at the center. In this scenario it is probable that the temperature limit would be exceeded, for whatever reason, even with advanced technology on and operating in unlicensed devices. Given that the limit is exceeded, and that the licensed carrier(s) experiences harmful interference: . . . How would the FCC determine in real time, or close to it, that the interference temperature limit had been exceeded? . . . What actions would the FCC be willing to take in a timely manner to reduce the interference to an acceptable level? *I.e.*, is the FCC prepared and willing to act on the day of the interference report, or would the Commission require several months of proceedings before taking enforcement action to reduce interference at a convention that lasts three days? ... Would the Commission identify individual unlicensed users in the area and compel them to turn their equipment off ...? ... How would the Commission enforce turnoff? Does the FCC have the ability, legally and practically, to enforce a turnoff requirement, and would it have access to sufficient enforcement personnel to do so in a timely manner? Are federal marshals available to arrest and incarcerate those who refuse to comply?¹⁹

It is essential that the Commission carry out its statutory responsibility to prevent harmful interference both through its rules and its enforcement procedures. The rules should specify the power flux density ("PFD") threshold, based on an evidentiary record, that would be deemed to represent harmful interference at a victim receive location, absent an agreement between the victim licensee and the interferor to employ a different threshold (higher or lower) for harmful interference. Absent clearly established PFD thresholds for harmful interference, enforcement will be difficult and potentially impossible.²⁰

(continued on next page)

¹⁹ Interference Temperature Comments at 37-38.

²⁰ For example, SDARS licensees have been authorized, pursuant to special temporary authority, to use terrestrial repeaters, but there are no rules concerning the signal levels that will cause harmful interference to WCS. As a result, terrestrial repeaters cause harmful interference to WCS operations, but there is no efficient way to address the problem. If there had been rules,

Prompt and effective enforcement of rules prohibiting harmful interference is essential. The Commission must investigate reports of harmful interference in a timely manner and ensure that the cost of curing and/or eliminating harmful interference is the sole responsibility of the party found to be the source of the interference. Moreover, the interference challenges that are posed when licensed and unlicensed users share the same spectrum are far more complex than when unlicensed use is confined to specific bands, such as the ISM and U-NII bands. To facilitate its ability to fulfill the critical role of interference "traffic cop," the Commission should maintain strict separation between licensed and unlicensed spectrum used for wireless broadband. In addition, the impact of an unlicensed underlay in licensed spectrum, no matter how small, undermines a licensee's incentive and right to exploit any margin that newer technologies may provide for the benefit of consumers through increased capacity, improved coverage, greater reliability, or new services.

V. EVENHANDED ENCOURAGEMENT OF INNOVATION

The Commission needs to create a regulatory climate that encourages innovation in communications technology. Not only is this required by Section 7 of the Communications Act,²¹ it also is a key component of the Commission's public interest responsibilities. Indeed, Section 706 of the Telecommunications Act of 1996 specifically charges the Commission with "encourag[ing] the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans" and empowers the Commission to forbear from regulation to

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⁽footnote continued)

WCS licensees either would not suffer harmful interference or would have clear, enforceable standards on which to rely if harmful interference were encountered. The absence of rules to govern harmful interference by SDARS to WCS operations has resulted in lengthy and ongoing negotiations while interference continues, instead of swift and certain enforcement.

²¹ 47 U.S.C. § 157.

achieve this goal.²² At the same time, not every innovation warrants a change in spectrum policy or allocations. Many innovations can be — and have been — developed for use in existing allocations. Often, innovations can be introduced by existing licensees — especially if the rules governing existing services are sufficiently flexible to accommodate market-driven, efficiency-enhancing innovations — without any need for rule changes. Likewise, many innovations in unlicensed spectrum use can be introduced, without any need for rule changes, by equipment vendors.

On some occasions, however, the proponents of an innovative technology seek to obtain a preferential status for their technology before it has been fully proven. This can result in the politicization of the rulemaking process, with the Commission initiating proceedings before a reasoned technical evaluation of the innovation can be made.²³ Moreover, the Commission should avoid favoring incumbents over new entrants or *vice versa*,²⁴ because any preferential treatment for a particular type of entity artificially manipulates the marketplace and, consequently, inherently diminishes consumer choice.

The process of technology evaluation should be reformed to ensure that the Commission has a reasoned basis for determining that a given innovation requires rule changes. To this end, the Commission should establish a joint FCC/industry task force, constituted as a Federal Advisory Committee, to monitor and issue periodic reports on new technological developments affecting spectrum efficiency. Technological developments that meet certain criteria agreed to by

Telecommunications Act of 1996, § 706(a), Pub. L. 104-104, 110 Stat. 153, codified at 47 U.S.C. § 157 note.

See, e.g., Ultra-Wideband Transmission Systems, ET Docket 98-153, First Report and Order, 17 F.C.C.R. 7435 (2002) (subsequent history omitted).

For example, the Commission's decision to relocate MDS channels 1 and 2/2A while delaying the determination of where they would be relocated discriminates against incumbent MDS licensees and favors new entrants who will be given earlier access to spectrum.

the joint task force should be evaluated within the confines of established Commission procedures, *i.e.*, notices of inquiry, to ensure that a full record is developed on the advantages and disadvantages of any new technology and whether it requires Commission action.

The Commission also should make clear that wireless broadband Internet access service is not subject to state public utility regulation. This conclusion is compelled by the Commission's position that Internet access service is an information service, not a telecommunications service. Moreover, to the extent wireless broadband service is deemed to include a telecommunications service component, it would fall within the statutory definition of commercial mobile service area and use a wireless-equipped laptop computer to access the service from variable locations. Congress has explicitly preempted state regulation of rates or entry with respect to commercial mobile service.

The Commission has long held that the provision of Internet access is an information service. See, e.g., Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, Notice of Proposed Rulemaking, 17 F.C.C.R. 3019, 3027 (2002). Moreover, the Commission has held that a given service can be either an information service or a telecommunications service, but not both. See, e.g., Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Declaratory Ruling and Notice of Proposed Rulemaking, 17 F.C.C.R. 4798, 4823-24 (2002) (Cable Modem Declaratory Ruling), aff'd and rev'd in part, Brand X Internet Services v. FCC, 345 F.3d 1120 (9th Cir. 2003).

²⁶ See 47 U.S.C. § 332(d)(1).

Because of the consumer's ability to move from place to place and use the service, wireless broadband constitutes "mobile service," as defined in the statute. Mobile service is "a radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves." 47 U.S.C. § 153(27). A mobile station is "a radio-communication station capable of being moved and which ordinarily does move." 47 U.S.C. § 153(28).

²⁸ 47 U.S.C. § 332(c)(3).

wireless local loop service constitutes commercial mobile service exempt from state rate and entry regulation.²⁹

CONCLUSION

For the foregoing reasons, BellSouth urges the Wireless Broadband Access Task Force to base its policy recommendations to the Commission on the core principles that (a) there be regulatory parity for comparable, competing services; (b) that the Commission rely, as far as possible, on market forces, and foster market-based decisions by establishing a stable, predictable regulatory environment; (c) that the Commission take appropriate steps to prevent harmful interference and enforce its interference rules in a timely manner; and (d) that the Commission even-handedly encourage technological innovation through establishment of a joint FCC/industry task force to evaluate innovative technology and make recommendations on how to increase spectrum efficiency.

Respectfully submitted,

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See Petition of the State Independent Alliance and the Independent Telecommunications Group for a Declaratory Ruling that the Basic Universal Service Offering Provided by Western Wireless in Kansas is Subject to Regulation as Local Exchange Service, WT Docket No. 00-239, Memorandum Opinion and Order, 17 F.C.C.R. 14802, 14812 (2002).